CHAPTER 3- Biological Environment

The environment of the Route 101 corridor passing through Rohnert Park is mostly urbanized. The existing highway right-of-way that is not paved is dominated by ruderal vegetation. The eastern side of SR-101 is lined with landscaped trees between Hinebaugh Creek and the Golf Course Drive exit. The western side of the highway has fewer trees because of limited right of way. Impacts to trees are discussed under "Tree Removal and the Federal Migratory Bird Treaty Act," Section 3.2.

Within the project vicinity, the California Tiger Salamander, a federally listed species, may potentially be present in the project area during construction. However, this species as well as other animals, plants, or wildlife habitat would not be significantly impacted under CEQA by the project. Listed species are discussed under "Threatened and Endangered Species," Section 3.3.

The project would also involve minor alternations of wetlands and waters of the U.S., as discussed under "Wetlands and Other Waters of the United States," Section, 3.1. Biological resources that would not be impacted by the proposed project are not discussed.

3.1 WETLANDS AND OTHER WATERS OF THE UNITED STATES

Regulatory Setting

The Clean Water Act (CWA) is the primary law regulating Waters of the United States, including wetlands. Wetlands are classified by three parameters: the identification of specific hydrologic conditions, the presence of soils that are subject to saturation/inundation, and the presence of plants (or their habitat) that are known to grow in wetlands. The U.S. Army Corps of Engineers (ACOE) regulates discharges and filling into Waters of the U.S., consisting of creeks, streams, or channels, through the Section 404 permit program.

Affected Environment

Much of the Waters of the U.S. that occur within the project area consist of low value drainages or culverted waters. The vegetation in the wetlands consists of mostly weedy exotic species. None of these wetlands serve as potential habitat for sensitive plant or animal species of the Santa Rosa Plains.

Hinebaugh Creek passes under Route 101 through a large box culvert approximately 225 meters (738 feet) north of Rohnert Park Expressway. This creek functions as a flood control channel and is owned by the Sonoma County Water Agency (SCWA). At the north end of the project Wilfred Channel also passes through a large box culvert with a concrete bottom and vertical concrete sides.

The field in the northwest area of the project contains some man-made, swale-like shallow ditches that drain toward a larger main ditch running along the edge of an old roadbed. Presently these ditches do not drain well and form a vernal wetland that is approximately 0.25 hectares (0.61 acres) in size. The main ditch that runs along the edge of the roadbed is 659 meters (2162 feet) long. The field is also very disturbed because it is plowed at least once a year. Wetlands have also been disturbed by billboard sign placement.

Environmental Consequences

Many low-grade wetlands within the project limits cannot be avoided and would be impacted by the highway construction. The wetlands in the field and approximately 203 meters (666 feet) of the large ditch adjacent to the old roadbed falls within the project footprint and would be impacted by the Build Alternative.

Table 3-1. Total Impacts to Waters of the U.S.

Wetlands	Culverted waters of the U.S.	Other waters of the U.S.
35079 ft^2	380 ft^2	2338 ft^2
0.7989 acres	0.009 acres	0.054 acres

Avoidance, Minimization and/or Mitigation Measures

Consistent with ACOE's "no net loss" policy regarding impacts to wetlands and waters of the U.S., mitigation would be required for this project. Early coordination with ACOE indicates that a 2:1 mitigation ratio would be required. However, this mitigation is not related to CEQA or NEPA. Impacts to wetlands and waters of the U.S. would be less than significant under CEQA based upon the disturbed, low-grade quality of these resources within the project area.

3.2 TREE REMOVAL AND THE MIGRATORY BIRD TREATY ACT

Regulatory Setting

The Migratory Bird Treaty Act (MBTA) (15 USC 703-711, 50 CFR Part 21 and 50 CFR part 10) implements international treaties between the United States and other nations devised to protect migratory birds. Because of this regulation, all trees and shrubs removed to accommodate this project must be removed at the proper time of year when the birds are not nesting. All tree and shrub removal must take place between September 15 and February 15 to avoid impacts to nesting birds.

Affected Environment

Most of the existing tree plantings are redwood trees. In the Santa Rosa Plain, the redwood tree is not in its natural habitat; therefore, their presence neither provides habitat nor is a biological resource in itself. These trees were planted along State Route 101 for their aesthetic value. One valley oak and several ornamentals, such as strawberry tree and pepper tree, were also found within the project limits. The oak tree has limited biological value as it is isolated and not part of an oak woodland.

Environmental Consequences

Highway widening on the eastern side of the freeway will require the removal of some of the redwood trees. The exact number of redwood trees which would need to be removed is unknown, but will be based upon safety requirements prescribing tree setback distances of approximately 9 m (30 ft) from the edge of the travel way. One valley oak tree with a diameter breast height (dbh) of 9 inches would be removed in the construction of this project.

Avoidance, Minimization and/or Mitigation Measures

Caltrans' policies call for the preservation and maintenance of existing trees and other native vegetation during the planning, design and construction of transportation projects. For this reason Caltrans' Office of Landscape Architecture would determine the degree of visual impacts that would occur from redwood tree removal, and the amount of mitigation that

would be necessary for redwood tree impacts (see Section 2.5 on Aesthetics/Visual Impact Assessment).

During biological studies, oak trees are identified so that adverse impacts resulting from oak tree removal may be avoided to the extent practicable. Replacement plantings are frequently incorporated into project design when impacts to oak trees are unavoidable. For the one valley oak that would be removed under the Build Alternative, Caltrans would replant 5 valley oaks in the project right of way in existing open space or at a nearby location.

3.3 THREATENED AND ENDANGERED SPECIES

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA). This law provides for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of FESA, federal agencies such as the FHWA are required to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that they are not undertaking actions likely to jeopardize the continued existence of threatened or endangered species or their critical habitat. The outcome of consultation under Section 7 is a Biological Opinion.

In addition to its role under the Clean Water Act, the ACOE is also a member of the Sonoma County Vernal Pool Task Force[13] (TF). The TF has developed the Habitat Quality Evaluation Assessment (HQEA), a tool to rank habitat quality in a geographic area known as the Santa Rosa Plain. In accordance with this protocol, Caltrans has conducted a HQEA for the project vicinity, which is subject to ACOE approval. The Habitat Quality Evaluation Assessment (HQEA) is just one tool being used to evaluate the project's impacts on CTS habitat and is a separate evaluation from the Biological Opinion issued by USFWS.

[13] The SCVPTF has representatives from regulatory agencies, local government, land management, environmental and community groups, agricultural community, landowners, and the public (Training Manual to Evaluate Habitat Quality of Vernal Pool Ecosystem Sites in Santa Rosa Plain, CH2Mhill, Dec. 1998).

Affected Environment

A field in the northwestern area of the project area has been determined to provide habitat for California tiger salamander (CTS). In its present condition the field is a vernally moist meadow that contains ditches and swales. The property may historically have supported vernal pool habitat but has been disturbed for many years by human activity. The land is presently ditch drained and is plowed every year at the owner's discretion for the purpose of maintaining the property and reducing fire danger.

Environmental Consequences

The proposed project falls within designated potential range for CTS in Sonoma County. The build alternative would impact 1.11 hectares (2.75 acres) in a strip of land approximately 474 m (1555 ft) long and 26 m (85 ft) wide for a proposed collector-distributor road. However, initial results of Caltrans' HQEA indicate that this area is of low quality, and therefore not a likely candidate for preservation efforts by the TF. Impacts to a seasonal wetland and two portions of drainage within the CTS habitat area would be unavoidable.

Avoidance, Minimization and/or Mitigation Measures

Measures would be implemented to minimize impacts to CTS and its potential habitat within the project area. Caltrans BMPs and avoidance measures would be in place. For instance, drainages and wetlands not impacted by the Build Alternative would be demarcated with high visibility fencing as an environmentally sensitive area to protect existing CTS habitat during construction. Although Caltrans would do its best to avoid CTS, complete avoidance during construction cannot be guaranteed. Once construction is complete, it would be necessary to replace the vegetation disturbed during project construction. Replanted vegetation would consist of native species similar to vegetation found in the drainage and season wetland locations. Caltrans and FHWA are proposing to offset project-related impacts to CTS by replacing its habitat on a 2:1 ratio or its equivalent.